

Calendar No. 382

117TH CONGRESS <i>2d Session</i>	SENATE	{ REPORT 117-114
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DEEPMODEL TASK FORCE ACT

R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

TO ACCOMPANY

S. 2559

TO ESTABLISH THE NATIONAL DEEPMODEL AND
DIGITAL PROVENANCE TASK FORCE, AND FOR OTHER PURPOSES



MAY 24, 2022.—Ordered to be printed

U.S. GOVERNMENT PUBLISHING OFFICE

29-010

WASHINGTON : 2022

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MAY 24, 2022.—Ordered to be printed

Mr. PETERS, from the Committee on Homeland Security and Governmental Affairs, submitted the following

R E P O R T

[To accompany S. 2559]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 2559) to establish the National Deepfake and Digital Provenance Task Force, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

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I. PURPOSE AND SUMMARY

S. 2559, the Deepfake Task Force Act, requires the Secretary of Homeland Security to convene a task force to examine how to reduce the proliferation of deepfakes and differentiate these digital forgeries from authentic images, video, text, or audio. Task Force members will be experts in artificial intelligence, media manipulation, digital forensics, and other related subjects and come from the federal government, higher education, and private or nonprofit organizations. The task force will develop a coordinated plan to reduce the proliferation and impact of deepfakes, including through new digital content provenance standards and technologies. The findings and recommendations of the task force will be submitted

to the President and Congress through an interim report and a final report.

II. BACKGROUND AND THE NEED FOR LEGISLATION

Deepfakes are highly realistic images and sounds that are created through artificial intelligence (AI) and machine learning (ML). Deepfake creators can use deepfake technology to manipulate media and replace an actual person's image or voice with artificial likenesses or voices. As the software underpinning these technologies becomes easier to acquire and use, the dissemination of deepfake content across trusted media platforms has the potential to undermine national security and erode public trust in our democracy, among other nefarious impacts.

The threat that deepfakes could pose if used in misinformation campaigns is well known and well-documented. The Congressional Research Service (CRS) has noted that “[s]tate adversaries or politically motivated individuals could release falsified videos of elected officials or other public figures making incendiary comments or behaving inappropriately. Doing so could, in turn, erode public trust, negatively affect public discourse, or even sway an election.”¹ Instances of such sophisticated misinformation have already been reported: fictitious journalists with invented backgrounds and AI-generated avatars have proliferated opinion pieces on various issues related to the Middle East,² and Taiwanese authorities have identified signs that China used AI-powered misinformation to interfere with Taiwan’s 2020 elections.³ Testimony before Congress has further highlighted the national security challenges of deepfakes and artificial intelligence.⁴

The 116th Congress responded to the threat of deepfakes with a variety of legislation, including Section 589F of the FY 2021 National Defense Authorization Act (P.L. 116–293), which requires the Department of Defense to complete an “intelligence assessment of the threat posed by foreign government and non-state actors creating or using machine-manipulated media (commonly referred to as ‘deep fakes’).”⁵ The Identifying Outputs of Generative Adversarial Networks Act (P.L. 116–258) directed the National Science Foundation (NSF) and the National Institute of Standards and Technology (NIST) to support research on generative adversarial networks, which are the systems that produce deepfakes. The Deepfake Report Act (P.L. 116–283) requires the Science and Technology Directorate in the Department of Homeland Security to report at specific intervals on the state of digital content forgery technology.⁶ While these laws provide important first steps in understanding deepfakes and their uses, they do not address the need for coordinated strategies to stem the proliferation of misinformation powered by deepfakes, including through digital content prove-

¹ Congressional Research Service, *Deep Fakes and National Security* (IF11333) (Jun. 8, 2021).

² *An Online Propaganda Campaign Used AI-generated Headshots to Create Fake Journalists*, The Verge (Jul. 7, 2020) (<https://www.theverge.com/2020/7/7/21315861/ai-generated-headshots-profile-pictures-fake-journalists-daily-beast-investigation>).

³ *China Uses Taiwan for AI Target Practice to Influence Elections*, The Australian (Jan. 5, 2020) (<https://www.theaustralian.com.au/world/the-times/china-uses-taiwan-for-ai-target-practice-to-influence-elections/news-story/57499d2650d4d359a3857688d416d1e5>).

⁴ Permanent Select Committee on Intelligence, *National Security Challenges of Artificial Intelligence, Manipulated Media, and Deepfakes*, 116th Cong. (Jun. 13, 2019).

⁵ National Defense Authorization Act of 2021, Pub. L. 116–283, Sec. 589F(b)(8) (2021).

⁶ S. 2065, 116th Cong. (2019).

nance technologies that could help distinguish authentic media from deepfakes.⁷

In response to the challenges of misinformation, private sector efforts are underway to develop standards to certify the authenticity and provenance of audiovisual content.⁸ Further, the National Security Commission on Artificial Intelligence has stated that this technology area is ripe for public-private partnership.⁹ The task force created by S. 2559 will include experts from the government, private sector, and higher education who will work together to produce a coordinated plan to reduce the proliferation and impact of digital misinformation through deepfakes.

III. LEGISLATIVE HISTORY

Senator Rob Portman (R-OH) introduced S. 2559, the Deepfake Task Force Act, on July 29, 2021, with Chairman Gary Peters (D-MI) as cosponsor. The bill was referred to the Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 2559 at a business meeting on August 4, 2021. The bill was ordered reported favorably *en bloc* by voice vote with Senators Peters, Carper, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman, Johnson, Lankford, Romney, Scott, and Hawley present.

IV. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

Section 1. Short title

The short title of the bill is the Deepfake Task Force Act.

Section 2. National deepfake and digital provenance task force

This section establishes a task force on deepfakes and digital provenance. The task force has 12 members (four members each from government, academia, and the private sector), and is chaired by the Department of Homeland Security (DHS) and the Office of Science and Technology Policy (OSTP).

The purpose of the task force is to reduce the proliferation and impact of deepfakes, with a specific focus on the development of standards for digital provenance. The task force will assemble experts to help develop necessary provenance standards to ensure digital provenance technology is accessible, interoperable with different cameras and internet platforms, and privacy-focused.

The task force will also propose research projects to improve the detection of deepfakes, policy changes to reduce the proliferation of deepfakes online, models for public-private partnerships to fight disinformation, and metrics to determine the success of technologies at reducing the proliferation of deepfakes.

The task force will generally be staffed by detailees from other agencies. Where the task force seeks to hire an individual outside

⁷ For example, the National Security Commission on Artificial Intelligence (NSCAI) recommended the creation of a task force, such as the one created by S. 2559, to study digital content authenticity and provenance. National Security Commission on Artificial Intelligence, *Final Report* (March 1, 2021), at 49.

⁸ *Id.*; see also Coalition for Content Provenance and Authenticity, Home Page (<https://c2pa.org>) (accessed Oct. 21, 2021).

⁹ National Security Commission on Artificial Intelligence, *Final Report* (March 1, 2021), at 49.

of government, that individual would be paid by their parent organization.

Finally, the task force will produce an interim report within one year after establishment, and a final report within 180 days after the interim report. The task force shall terminate 90 days after the final report.

V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office's statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, January 11, 2022.

Hon. GARY C. PETERS,
Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 2559, the Deepfake Task Force Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Lindsay Wylie.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

S. 2559, Deepfake Task Force Act			
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on August 4, 2021			
By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	1	3	not estimated
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

S. 2559 would require the Department of Homeland Security (DHS) to establish a task force to address digital content forgeries, also known as “deepfakes.” These forgeries manipulate digital content, such as videos, with the intent to mislead the viewer. The task force would investigate the feasibility of deploying standards and technologies for verifying the origin and history of digital content. The bill also would require DHS to develop a national strategy to address threats posed by digital content forgeries in consultation with federal agencies and private and non-profit organizations. The task force would submit an initial report to the Congress on its findings and recommendations after one year, transmit a final report six months later, and terminate three months after the final report is submitted.

The task force would consist of 12 members, including two chairpersons from relevant federal agencies. The other 10 members would include two additional federal employees and eight representatives from non-profit or private organizations or institutions of higher education. The bill would allow members to be reimbursed for travel expenses. Using information about the cost of similar entities, CBO estimates DHS would need \$3 million over the 2022–2026 period for staff, travel, and other administrative expenses to operate the task force. Such spending would be subject to the availability of appropriated funds.

The CBO staff contact for this estimate is Lindsay Wylie. The estimate was reviewed by Leo Lex, Deputy Director of Budget Analysis.

VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

Because S. 2559 would not repeal or amend any provision of current law, it would make no changes in existing law within the meaning of clauses (a) and (b) of paragraph 12 of rule XXVI of the Standing Rules of the Senate.

